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LAKE CARRIERS' ASSOCIATION.

To consider and take action upon all general questions relating to the navigation and carrying business of the Great Lakes, maintain necessary shipping offices and in general to protect the common interests of Lake Carriers, and to improve the character of the service rendered to the public.

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A NATIONAL NAVAL RESERVE.

Definite plans are being formulated at the Navy Department for recommendation to Congress for the organization of a Federal Naval Reserve. It will be remembered that for several years past there has been a disposition on the part of the present Secretary of the Navy to do all in his power looking to the establishment of a well-equipped and organized reserve force for the Navy. Last year it was evident that Congress was favorable to the project, but notwithstanding this the bills introduced were never acted upon. It is believed and hoped, however, that there will be no trouble this year to obtain the passage of a bill providing for such an organization.

Lieutenant Commander Southerland of the Navy has been greatly interested for some time in efforts to obtain authority for the organization of a Naval Reserve, but, as he will make a report in the near future to the Secretary of the Navy, he refuses to divulge now the places which have been made. It is known, however, from other sources what the salient features will be of the recommendations to be made this year to Congress. The object of the Naval Reserve is to have in readiness for any emergency a well-trained force of officers and men, who can be depended upon for service on the outer line of sea defenses. It is proposed to have a special clause put in the enlistment papers of Coast Signal Service men and men of the Light-House Service providing that in time of war or other emergency their services can be called upon for the inner line of defense or coast defense, under penalty of desertion.

Several suggestions of more or less merit have been made to the Navy Depastment for the organization of a Naval Reserve. The one which meets with the most favor, however, is that which looks to the establishment all over the country of naval districts at which will be located "ship's companies" of the Reserve, which will be given each year regular training on board some vessel of the Navy. These companies will be under the command of the Naval Reserve officers, none of whom will hold rank higher than lieutenant commander, and who will be under the orders of the regular Naval officers when the company is at sea. The idea is to have the yearly training conducted in every particular as if the Reserve men were regularly enlisted men of the Navy. There will be no way of getting out of the hard work incident to the life of every seaman, and as the men will be enlisted in the Reserve, they will be obliged to obey all orders given them by any officer.

It is the idea of the Department at first to form the Naval Reserve as far as possible from what is the present Naval Militia. The men will be given an opportunity to enlist in the Reserve and the officers will be taken into the Reserve without any examination. Later officers for the Reserve will have to appear before a board composed of regular officers of the Navy, who will determine their fitness for commissions in the Reserve.

As to the strength of the Reserve, a majority of officers of the Navy think that it should be of like size to the regular Navy. That is, for every enlisted man of the Navy there should be an enlisted man of the Reserve. It is not believed, however, that Congress will agree to such a large force at the start, but probably the Reserve will begin with an enlisted strength of 7,000 men. The officers of the Reserve will be carried in the regular manner upon the Navy register, and promotion in the force will take place in a similar manner to promotion in the regular Navy. During the cruises of the reserve the officers and men will receive the pay of the grade which they may hold. It is not proposed to call upon the states for any support whatever.

The project of having a Naval Reserve is a most excellent one for many reasons, and, The Army and Navy Journal says we are glad to see that it meets with the general approval of the service. Our experiences in the late war should show how extremely difficult, and in fact impossible it is, to get upon short notice the hundreds of enlisted men required for the expanded Navy. In time of peace it is only too hard to get men for the Navy, and if war should suddenly break out it would be impossible to get enough men to put into commission all of the vessels of the Navy. How advantageous then, would it be to have a well-equipped and trained force always in readiness for active service on the vessels of the Navy. As far as men are concerned we would then have a force probably sufficient to care for all of the regular ships of the Navy, as well as for the many auxiliary vessels which would be called into immediate service. We hope the recommendations to be made by the Secretary in this regard will meet with unqualified support by Congress.

CANADIAN RESOURCES AND PRODUCTS.

(FROM AN ADDRESS BY JOHN CHARLTON, M. P.)

It is safe to say that the present surplus of Canadian products can be increased twenty-fold, leaving ample stores reserved for the wants of the population that will flow into the northwest. Outside of this great region the older Provinces, the Maritime Provinces, Quebec and Ontario, and British Columbia, contain an area of 997,000 square miles, and possess enormous agricultural, mineral and timber resources. The northwest is rich in iron, coal, petroleum, copper and gold. The same is true in a more remarkable degree of British Columbia, and applies also to the territories of the other Provinces. The timber resources of the Dominion are very extensive, and will prove a possession of great value in the future. No country in the world is possessed of more extensive or valuable fisheries. We have not only those of the Atlantic coast, which have been fairly well developed, but we possess fisheries of enormous value in Hudson Bay and in the Arctic waters, and all of the great interior lakes contain swarms of whitefish and trout of the finest quality.

Hudson Bay is a great inland sea, entirely within the boundaries of Canada. It is 1,100 miles in length, including Chesterfield inlet, its northwest arm, and James Bay, its southern extension, and covers an area of over 350,000 square miles. It is larger than the German Ocean, whose fisheries yield a return of over $40,000,000 annually. It has cod banks, walrus and whale fisheries, and upon its east shore are salmon streams, and enormous deposits of iron ore conveniently situated for shipment.

The chief river systems of Canada are the St. Lawrence and the MacKenzie. The latter flows into the Arctic Ocean. The Athabasca is the most southern tributary. It receives the waters of the Peace river and the Athabasca river, the tributaries of Athabasca Lake, the tributaries of Great Slave Lake, and the tributaries of Great Bear Lake, Laird river, Hay river and numberous other streams. The navigation of this great system of lakes and rivers will exceed 7,000 miles in length, and will require the improvement of only one short series of rapids on Slave river, between Athabasca and Great Slave Lakes. This great northwest region by means of short lines of railway can lay down its productions cheaply at harbors on Hudson Bay. Less than 200 miles of railway will connect Chesterfield Inlet with the navigable waters tributary to Great Slave Lake. A line of railway 400 miles in length would connect the eastern end of Lake Athabasca with the fine harbor at Port Churchill, on Hudson Bay. Either of these two routes could draw business from the entire navigable stretches of the Mackenzie system, and would, if access to open sea is attainable, afford a practicable outlet to all the regions of the northwest adapted to the growth of grain. If Hudson Straits are navigable for four or five months in the year, this will be the route to the markets of the world for the great region, with its untold future possibilities, embraced within the limits of the grain growing area of the northwest.

INCRUSTATION OF BOILERS.

The Revista Minera Melalurgica y de Ingeneria, of Madrid, the leading journal of its class in Spain, speaking of preventives of incrustation of steam boilers, says:

The use of zinc to prevent the oxidation of the iron and the incrustation in steam boilers has greatly increased during recent years. Heretofore, zinc has been employed for this purpose only in the shape of raw pigs, but after many experiments made by the society of "Mines et Fonderies de Zinc de la Vieille Montagne," which have since been confirmed by the British Admiralty, by the national French marine, and many great maritime companies, it has been established that compressed laminated zinc made in the form of thick plates for application as an inside boiler lining is greatly superior to the old method. In fact, the galvanic current developed transforms the pig of raw zinc into a more porous substance, in which the metallic molecules are insulated one from the other by the corrosion which is quickly produced, resulting in this, that the intimate metallic contact, which causes the generation of the electric current, is eliminated. Compressed laminated zinc, on the contrary, resists the spongy internal corrosion, as it corrodes only on the surface, thus being very slowly consumed and being capable of conducting the current as long as a metallic nucleus remains. The application of the laminated plates is very simple. They are applied to the walls of the boilers by means of strips and are so distributed that the galvanic action is exercised in an even way, when possible, over the entire surface of the iron. When oxidation is produced in any part of the boiler, it is because the nearest zinc plate is too far away. By this employment of pressed zinc the incrustation of the boilers is avoided, and at small cost.

THE cruiser Leviathan for the British navy was recently launched on the Clyde from the shipyard of Messrs. John Brown & Company. When completed this vessel will be the heaviest cruiser afloat, even excelling those built for the Japanese navy. She is the first of what is known as the "Drake" class, and was ordered in 1899. The vessel is 500 feet in length, and displaces 14,160 tons. The engines are to develop 30,000 horse-power, which will produce a speed of 23 knots. Her armor is also considerably heavier than that of any other ship of her class.

DULUTH-SUPERIOR.

Special Correspondence to the Marine Record.

Grain freights are slow at former quotations and vessels chartered ahead have now the best of it.

The receipts of Manitoba wheat at Duluth during the month of September were 681,000 bushels; shipments 248,000 bushels.

There has been but very little change in the Duluth wheat situation during the past week. The demand from the East still continues very tame, shippers reporting it easier to buy back their shipping contracts than it is to make new ones.

Capt. C. M. Davis and Capt. Kidd held a survey on the Case, which had a touch-and-go damage while upbound with coal. The Case struck west of Detour in thick weather, breaking her forefoot and damaging planking. The cost of repairs is estimated at $1,800.

Those who have made a study of the conditions of the weather on the upper lakes, have predicted that there will be an early close of navigation on Lake Superior. Some of the old skippers are a little backward about making predictions, but they say that the fall weather on the upper lakes has been extraordinarily severe so far.

The steamer Ottawa, of the Canada Atlantic Line, struck on a bowlder off Great Duck Island on Tuesday, breaking a plate in the after ballast tank on the port side. The break was not serious enough to detain her and she proceeded to this port to go into drydock. The Ottawa was in ballast trim when she fetched up and the total damage will be but trifling.

Judge Lynde Harrison, who is a director of the Consolidated Lake Superior Co., and of the Ontario Lake Superior Co., decides that the suit of Alton Miller, of New York, against the Consolidated Co., for an injunction to restrain the purchase by the Consolidated Co. of the stock of the Ontario Co., has been withdrawn by the plaintiff in the United States Circuit Court. The plaintiff is ordered to pay the defendants' costs.

Capt. Inman's project for the construction of an ice-breaking steamer to navigate the lakes winter and summer still hovers in the air. While at Sault. Ste. Marie, last week, he intimated that this model had received the approval of Frank E. Kirby to the extent that the latter now constitutes one of a company formed to build three of the steamers. Capt. Inman thinks that the first three boats will be running a year from the coming winter over the lower lake routes.

The Ashland Lumber Co. sold two cargoes of lumber this week, amounting in all to about a million feet. One cargo of No. 4 boards was sold to parties in Lorain, O., and another cargo of No. 5 boards was sold to Muskegon, Mich., parties. This stock was on the Ashland docks. D. L. Wiggins went to Washburn with C. A. Nicoli, of the Nicoli Brothers Lumber Co., of Cleveland, to look over some stock and it is very probable that Mr. Nicoli will make a purchase before he returns east.

Capt. Reed, of the steamer Harvard, belonging to the Pittsburg Steamship Company, is reported to have probably located the wreck of the steamer Hudson. When off Eagle harbor on his last trip to Duluth, there was a heavy dead swell running. At intervals, in the trough of the sea, could be seen at some distance from the Harvard, what looked like a spar protruding a few feet from the water. Captain Reed pricked off the spot on his chart, and it is expected an official report will be made of the locality. It is said that the spar probably would not be visible in perfectly smooth water. It would appear from this, if the object noted is a spar of the lost Hudson, that the boat is resting on an even keel and in water not so deep as to make her recovery impossible.

It is reported that the Booth Company contemplates putting on a line from Duluth to Sault Ste. Marie, either next season or the season of 1903. If the next season, then the company will build two boats the coming winter instead of one. One boat will be built to be ready to go into commission at the opening of navigation, and will be on the north shore run, making three trips a week to Port Arthur, and at least two a week around Isle Royale. The Argo will go on the south shore run, to which trade it is better adapted than the north shore trade, and when the company is ready to operate between Duluth and the Sault a second boat will go on the south shore. It is said that when the Duluth-Sault line is established the boats will touch at all south-shore points offering any traffic.

CLEVELAND.

Special Correspondence to The Marine Record.

The Chase Machine Co., marine machinery, gas and gaso line engines, etc., has just completed and shipped one of its worm-geared, friction-driven engines to the order of the Pittsburg Coal Co. This machine is designed to operate the spout of a coaling plant. Lines from one set of drums raise and lower the spout, and the other drums swing it in or out.

Offerings of ore tonnage are light all around and while shippers are not pressed for vessels they would not be able to do any business if the movement of grain was heavy enough to cut any figure. Grain is slow reaching Duluth and vessels under charter are delayed in getting cargoes. Two boats were placed for wheat Wednesnay, Ft. William to Buffalo, at 2⅜ cents.

Major Kingman, Corps of Engineers, U. S. A., believes that, with the shore east of the river properly protected, other docks will be located there, which will increase the shipments through Cleveland's water routes. On this belief the Lake Carriers' Association and the maritime board of the Chamber of Commerce, aided by Major Kingman, will, during the fall, carry on a campaign for an appropriation for the harbor work of Cleveland.

The casualties caused among deeply laden vessels by the recent stormy weather is attracting some attention and leading owners to the exercise of caution. A recent circular letter from the manager of the Pittsburg Steamship Co.'s fleet, it is said, instructs captains of the smaller vessels not to load deeper than 17 feet from now on until the close of navigation. It may be remarked, however, that the Pittsburg Steamship Co. have no old wooden coffins to lose, those who have them are less magnanimous.

The Brown Hoisting Machinery Co. is at work on a 100-ton pontoon crane for the Brooklyn navy-yard. It is to rest on a pontoon 60x100 feet and will have an overhang at either end of 45 feet; the total length of travel being 190 feet. At 45 feet overhang the crane will have a lifting capacity of 100 tons. The crane is provided with automatic counterweights so that the pontoon only lists three inches in picking up a 100-ton load. The pontoon is being built at the Cramp's shipyard, Philadelphia, and the entire equipment will be completed before the end of the year.

Capt. A. R. Robinson, of Conneaut, master of the Crescent City, which rescued the crews of the M. M. Drake and the Michigan, on Lake Superior, received a telegram from Capt. A. B. Wolvin, general manager of the Pittsburg Steamship Co., saying that the company will send reward money to be divided among the members of the crew as a token of the company's appreciation of their heroism. Capt. Robinson did not know the amount of the sum to be divided. This, from Capt. Wolvin, is a step in the right direction and he is latterly doing things about right all the time.

The officers of the Great Lakes Towing Co. do not express any great fear of the opposition which has started against them at Toledo and Buffalo, headed by Captain Sullivan. The principal reason for this is that the tug company recently purchased, with the Maytham outfit, about all of the tugs on the lakes which might put up any sort of a fight against their better equipment. Those boats left outside are either not large enough to do any damage or are not numerous enough to go around. Added to this the company now claims to be giving good service to patrons, and they have faith in the stability of their relations with vessel owning companies.

The crews of the steamer M. M. Drake and of the schooner Michigan, which foundered on Lake Superior last Wednesday, made their report at the office of Captain James Corrigan, who owned the lost boats. The Crescent City came up to the Michigan at noon and found nobody aboard. They had been taken on the Drake at 1:35 p. m., and the schooner sank at 2:05 p. m. At 5:30 p. m. the Drake was spoken and the captain asked for assistance. The smokestack of the Drake had been carried away by the jibboom of the Michigan when the schooner was pulled up to the Drake. When the Crescent City got alongside the Drake the crew of the latter were breaking up cabins and furniture to make steam to work the pumps. The Drake was sinking then, and at 5:40 went down. The Northern Wave had twice attempted to rescue the Drake's crew. Two lines were got across and four men taken aboard the Wave. Then the Drake punched a big hole in the rescuer's side and the Northern Wave withdrew. The Drake was overtaken forty-five miles west northwest of Whitefish Point. It was snowing and hailing and a high sea was running. The men were landed at the "Soo."

The statistics of iron ore shipments have been noted with interest by ore selling firms in the past week. The Iron Trade Review says: The total movement from all upper lake ports in September was 2,893,669 gross tons, against 2,519,043 tons in September, 1900—an increase of 374,626 tons. For the season up to Sept. 30 the shipments this year were 15,157,105 tons, as compared with 14,885,065 tons to Sept. 30, 1900. This is an increase for the season of 1901 over 1900 to same date, of 272,040 tons, or 1.83 per cent. Estimates on the season's total are beginning to be made. They fall somewhat under 20,000,000 tons for water and all-rail shipments. Last year the movement by lake was 18,570,315 tons, the all rail shipments bringing the total up to 19,059,393. If unsold ore comes down to a fair amount this year, the next two months might readily yield a total of 4,500,000 tons by water. It is evident that furnacemen have yet to buy considerable ore, both Bessemer and non-Bessemer, to carry them up to the opening of navigation next year. There has been a fair amount of buying in the past month, and sellers have now comparatively little to offer. On some of the best Bessemer ores of the Mesabi range advances of 15 and 20 cents over early prices have been obtained in these recent transactions.

BUFFALO.

Special Correspondence to The Marine Record.

The hull of the burned steamer Avon is to be converted into a St. Lawrence river barge. She was recently purchased by the Hannan Co., of Ogdensburg, and the work of removing the machinery will be begun as soon as the new owners get the craft in their hands.

The Gilchrist Transportation Co., owners of the steamer City of Genoa, which was damaged by fire recently, has libeled 110,000 bushels of wheat which are stored in the Eastern elevator. The action was brought for $7,500 for services rendered the owners of the wheat when the vessel was burned.

The remains of the late engineer Vogt, of the ill fated Hudson, were laid to rest in Pine Hill cemetery. The pallbearers were selected from the Marine Engineers' Beneficial Associations. One of the bearers was mate Rebenhagen, formerly of the Hudson. The Marine Engineers sent a beautiful floral piece in the form of a roll of honor.

The new Independent Tug Co. will, it is said, place two tugs in service at Tonawanda. Capt. Cy Sinclair, the new manager of the syndicate octopus and wealthy capitalists that thought they could tax the lake tonnage to the ground may not be equal to the occasion any more than Collier was. In any case the Independent Towing Co. are willing to take a fighting chance if what I hear is correct.

Manager Gibson L. Douglas, of the Western Transit line, has just received an interesting souvenir in the form of a neat little box made from a piece of wood taken from Lake Erie to New York on the first trip of the first canal boat, the Seneca Chief, on Nov. 4, 1825. The box was made in New York city and has been carefully treasured by its owner, until presented to Manager Douglas, who will in turn present it to the Buffalo Historical Society.

Capt. A. C. Potter, of the Lehigh Valley liner Saranac, has noted protest because of the stranding of his vessel near the lower end of the St. Clair ship canal on Saturday. It appears that the steamer Whilhelm, with barges in tow, parted her wheelchains and took a sheer toward the Saranac. This necessitated stopping and backing on the part of the latter, and her stern was thus swung aground. No damage was sustained, tug bills were incured in order to get off.

The hull of the steamer Avon of the Union Transit Co., which was burned on Lake Superior several weeks ago and declared a constructive total loss, was sold to John Hannan, of the Hannan Coal & Transportation Co. of Ogdensburg, and will be immediately repaired. At first it was thought that the Avon would be converted into a barge and used for the lumber trade, as it was believed the expense of putting her machinery in condition would be too great. It has, however been decided by her new owner to rebuild.

Eight in all of the unfortunate members of the Hudson's crew have now been recovered. The Western Transit Co. has spared no expense or effort to secure and identify the bodies of the drowned men, and so far as possible return them to their homes. The Western Transit Co. is entitled to the thanks and best wishes of the entire marine fraternity for the noble manner in which they have looked after those who lost the number of their mess in the Hudson, and may we hope that other owners will go and do likewise.

The Canadian Niagara Power Co., which will build a large electric power plant on the Canadian side at Niagara Falls, has awarded the contract for the tunnel and portal. The price is over half a million, and the work is to be completed by January 1, 1903. The tunnel will be 2,200 feet in length and 19x21 feet in diameter. It will be bricked throughout the same as the tunnel on the American side. The shaft has been sunk the required depth, and the contractor will immediately commence the work of excavating the tunnel.

Edward Gaskin is still at work on a project to build a dry-dock. It is said he will not try to do much at it this year, but expects to get a start next season. Mr. Gaskin is supposed to be backed by New York capital, which has been convinced that opposition to the American Ship Building Co. in this line of work would be popular with the vessel owners of the lakes. Regarding the project to build a plant at St. Joseph, it is said that such a movement would be for a dry-dock only. This would be to accommodate such sized boats as trade to that port, and consequently would be but a small affair.

The Ogdensburg Journal says: Capt. D. A. Kiah, for many years master of the Rutland line, has retired from the command of the steamer F. H. Prince. His successor is William Spence of Watertown, formerly first mate of the Governor Smith, with Capt. Shay. The retirement of Capt. Kiah and the promotion of mate Spence necessitated other changes in the fleet officers. Spence's successor on the Smith is Patrick Berry, of Prescott, and James Burns, also of Prescott, goes in the Prince as first mate. The Prince carried away some gates in the Welland canal, causing about $2,500 damages, and this may have had some bearing on the retirement of Capt. Kiah.

CHICAGO.

Special Corresponaence to The Marine Record.

Corn at 1¼ cents and wheat ⅛ cent better is all that is offered here this week with very light chartering.

Shipments of grain from Chicago and South Chicago last week were 3,045,000 bushels, of which 2,185,000 bushels were corn.

Capt. George Pardee has retired from the command of the Graham & Morton liner Soo City. He is succeeded by Capt. Russell of the sidewheel steamer City of Chicago.

The steamer F. T. Heffelfinger built at the Sonth Chicago yards of the American Ship Building Co., is 4,899 tons gross and 3,630 tons net. She hails from Duluth, Minn.

It is announced that the Williams line contract for their new passenger steamer will be placed within the next ten days. It is understood that the work will be done by the American Ship Building Co., either at South Chicago or Cleveland.

The Goodrich Transportation Co. announces a reduction of 66⅔ per cent. in its passenger rates between Muskegon, Grand Haven and Chicago. The rate has always been $3 one way and $5 round trip, although the Barry line has asked only $2 one way and $3.50 round trip. The Goodrich line announces it will sell tickets one way for $1 and round trip for $1.50.

Negotiations are reported to be under way for the building of an extensive shipyard at St. Joseph, Mich., and it is proposed to organize a company with a capital stock of $75,000. The work of dredging the Morris channel and building docks will soon be started. Promoter Allmendinger says that in two years the largest boat that frequents Lake Michigan can be drydocked at St. Joe but others seem to think that it is somewhat of a pipe story.

The steel dredge built by Johnston Bros. for the Buffalo Dredging Co. will be launched on Wednesday at Ferrysburg. The dredge is 116 feet long, 40 feet wide and 13 feet deep and is the largest and strongest structure of the kind in the country. It is designed for deep water work and will be taken to Buffalo at once to receive machinery. Two of the largest fir timbers ever shipped from the Washington forests are used as spuds or anchor posts on the dredge.

News from the stranded whaleback steamer Thomas Wilson at Bailey's Harbor was not as favorable as earlier reports. Capt. Swain of the Favorite reported that the Wilson lies on the old lighthouse shoal about three-quarters of a mile from shore. The forward end of the steamer is free. The engine room is full of water showing the ship's bottom aft to be badly cut up. The Wilson has a bad list to starboard, which may prevent use of hydraulic jacks in lifting her from the rocks. The water remains favorable for wrecking operations.

The launch of the Fred B. Wells, the fourth steamer of the Peavey fleet, marked the building of the fiftieth boat by the Chicago Ship Building Co. in twelve years. A large crowd witnessed the launch, including many prominent business men of Chicago. The Wells will be ready for sea by the middle of November. The F. T. Heffelfinger launched several weeks ago, will make her maiden trip in about a week. All of the fifty ships built at South Chicago are still in service and include many of the most successful cargo carriers on the lakes.

Capt. John McSweeney, Milwaukee, of the tug W. H. Meyer, is in receipt of a letter from Capt. John Tower, of the Counselman steamer Northwestern, dated Antwerp, September 25, in which he states that after having been in the coastwise trade on the North Sea he had returned from Hamburg a few days previous to take on a full cargo for Montreal, Milwaukee and Chicago. The start on the return trip across the ocean would be about Wednesday of the present week, which would make the Northwestern due at Montreal between the 15th and 20th of October.

Emma E. Thompson was struck by the Clark street bridge in passing through the draw on Tuesday and had nearly all of the after cabins carried away. The bridge tender opened the bridge and the steamer entered the draw. The bridge tender apparently lost control of his machinery, for the bridge did not stop when it was wide open, but continued turning and the end of the structure swung into the steamer's cabins. James Peterson of Racine, was the only one in the cabin. He suffered a bad injury to his arm and was compelled to leave the boat for treatment. The repairs to the steamer will cost about $700.

The September report of traffic through the Soo canals is a surprise to the marine interests, inasmuch as it is a record maker for the month of September in any year. The total freight passing through, as shown by the report, was 4,135,237 tons, as against 3,411, 453 tons for the corresponding month of last year, an increase of 721,603 tons. The aggregate tonnage for the year up to Oct. 1 is 20,369,065 tons. This shows that the traffic has not only recovered the losses sustained during the first part of the season, but is now ahead of last year's traffic nearly 500,000 tons, the exact figures being 467,592 tons excess, the total up to Oct. 1, 1900 being reported at 19,901,473 tons. The total traffic for 1900 was 25,643,073 tons. Taking September as a basis for further increase during the season, the record of last year should be increased by nearly 1,000,000 tons.

DETROIT.

Special Correspondence to the Marine Record.

The two steamers building at Craig's Toledo yard for the West India fruit trade will be named Watson and Buckman, though, I suppose the RECORD has been duly informed of this before now.

In less than thirty days the new steel steamer Hugoma will leave Detroit on her way to the ocean and in all probability will never return to fresh water. Special tonnage is now in demand for special trades and the Hugoma is built to suit her present owners.

The Watson, built by the Craig Ship Building Co., Toledo, is 1,821 tons gross, and 1,237 tons nət, according to custom house measurements. Her signal letters are K. R. G. F. and official number 81,788. The Buckman, also built by the same firm, is 1,820 tons gross and 1,237 tons net.

The following meteorological observations are furnished by the office of the U. S. Weather Bureau, Detroit, for the week ending Oct. 8th, 1901. Prevailing wind directions for the week N. W.; highest velocity 24 miles N. W. on the 2nd. Mean temperature for the week 50°; highest temperature 72° on 8th; lowest 32° on 4th.

An examination has been made of the Poe lock to ascertain the damage done by the steamer Robert Fulton, a few days ago. It was found that several plates in a leaf of the gate were badly cracked, and the gate is badly warped out of alignment. Repairs will not be made until the close of navition and the intermediate gates will be used.

S. A. Whipple, the well known marine artist of this city, died of paralysis on Tuesday morning at his home here. Mr. Whipple was at one time a captain on the lakes but retired some years ago to engage in painting marine views. One of his best pictures is that of the ill-fated steamer Hudson. He also painted many pictures of the D. & C. line fleet. He was forty-five years of age.

The new docks and warehouses of the Anchor line will be in readiness for business by the opening of navigation next season. The rebuilding of the old Beecher dock by the Anchor line and the improvement of the old Anchor line dock by the Detroit and Buffalo line will give this city nearly half a mile of as fine dock property, devoted to passenger business, as can be found anywhere on the whole chain of lakes.

Owners are still hammering away at the shippers for a rate of $3 on lumber out of Duluth, with proportionate rate from way ports. The lumber there is to be moved, and the boats are receving good dispatch. Duluth, however, is short of the number of boats demanded, because some of the owners are sending their tonnage for short haul rather than send them to Duluth for less than $3. By this means the owners hope to persuade the shippers to pay the advance. The ruling rate now is $2.75 from the head of the lakes.

Secretary-treasurer Henry C. Barter, of the International Longshoremen's Association, left for New York, on Wednesday, to meet the executive council of the Longshoremen's Association of Greater New York and endeavor to bring them into the international association. For the past two years negotiations in this direction have been pending and Barter is confident that he will succeed in closing up the business before he returns. There are eighteen local branches in New York, representing the dock workers of New York, Brooklyn, Hoboken and Jersey City. Each local sends a delegate to the executive council and it is this council as well as various locals which Barter will address. On the trip he is accompanied by fourth vice-president J. J. Joyce, president of the Grain Scoopers' Union of Buffalo.

The War Department has just issued a bulletin, giving supplemental information to the Government charts recently issued. The bulletin touches very largely upon the new work which has been done on Lake Erie during the summer, both in the way of surveys for new found obstructions and in the way of placing new harbor protections at the various ports. The new breakwater at Conneaut is chronicled, the lights displayed there being designated. The repair work is also shown at Ashtabula and Fairport. The bulletin mentions the work at Lorain, where the old pier is to be replaced with a new one giving a wider entrance to the harbor. Toledo's long channel through Maumee Bay is also mentioned, showing the improvements which have been made. The bulletin may be had by the masters at the various engineers' offices over the chain of lakes.

While the Limekilns Crossing has claimed the larger portion of the expensive groundings this summer, marine and insurance men declare that the north end of Harsen's Island in St. Clair river has had fully its share of strandings. Since the opening of navigation seven vessels have landed on the Long shoals pit which runs out from the upper end of the island. The steamer George W. Roby, opened the ball May 10, the Thomas Davidson followed July 16, the Boston, Aug. 3, and the S. S. Curry, Aug. 27. The Yale went on Sept. 30, and the wrecking bill which resulted was $6,000. The last boats to find this place were the Iron Age and Ashland, Oct. 4. In former seasons, a light has been kept on the outer end of the spit and accidents were few. Last winter the ice carried away the light and vesselmen are now thinking about circulating a petition to have it restored.

HENRY W. CRAMP, the eldest son of the famous shipbuilder, Charles H. Cramp, and the vice president and treasurer of the Cramp Ship and Engine Building Co., died at Devon Inn., Philadelphia, Oct. 3. Acute pneumonia, following a general breakdown due to hard work, was the immediate cause of death. Mr. Cramp was born in Philadelphia, in 1851, and after completing his education entered the machine shops of the I. P. Morris Co. to learn the practical side of the shipbuilding trade's most important branch. Ill-health interrupted his plans for learning a mechanical trade, and he went to sea for two years in service of the Clyde line. Later he was in charge of the New York office of the company when it operated the Erie basin dry dock. In 1886 he succeeded his uncle as secretary of the shipbuilding concern and on May 12, 1891, he became a director. He was elected vice-president and treasurer on June 6, 1895. Essentially a business man, few equaled him in quickness of perception as to the merits of any enterprise brought to his notice. His devotion to business was intense. Except on the command of physicians he had never taken a vacation.

LITTLE KNOWN CITATIONS USEFUL IN REVISING TREASURY TAXES.

Items concerning tonnage taxes, and taxes for dry-docking vessels as "supposedly "incident to repairs" in Canadian ports, are among the current topics. Does the phraseology of any statute make it the sole privilege of any executive officer to decide what is "due process of law?" For instance the Act of July 5, 1884, section 3, reads: "On all questions of interpretation relating to the collection of tonnage tax, and to the refund of such tax when collected illegally, the Commissioner of Navigation's decisions shall be final." If any such commissioner should send a wagon some dark night into the country and stealthily "collect" a ton of hay from a sleeping farmer, and call it "tonnage tax," the judicial branch of the national government would perceive and decree that the jurisdiction of any Treasury official could be enquired into in all matters, and where the abyss between power to tax and lack of it was not so yawning as in the illustration given.

Treasury officers may be asked to revoke their own "final" decisions on the ground of some want of jurisdiction. As a "Secretary is the regular constitutional organ of the President and rules and orders promulgated through him must be received as acts of the Executive and as such binding" (22 Op. 57); and as there is "almost absolute necessity of having uniform rules of decision in all questions of law in analogous cases" (5 Op. 97);—the President's decision in Navy and War Department cases, may, in "analogous cases" in the Treasury be cited. One objection to reconsidering a decision is its having been rendered during a prior administration. Certain Navy and War Department rulings override this objection.

The Navy Register of Jan. 1, 1870, p. 122, recites that Paymaster Edw. Bellows was "dismissed Jan 28, 1869." Thereafter his name is found no more on Navy Registers until that of July 1, 1880, p. 31, when he is inscribed as being on "waiting orders," from "Jan. 28, 1869," (11 years,) which was entitled, "Date of his present order or leave." From 1869 to 1880, over 11 years, he was represented as having been dismissed from the Navy. He was restored by the Navy Department because it admitted that it had no power to remove him from the rolls in 1869. And yet the question upon which the Department's lack of power in 1869 was said to depend, was exceedingly narrow. Bellows was found guilty by a court-martial, Nov. 7, 1868, of embezzlement, "and sentenced to make good to the Government the money of which the Government was defrauded by him and to be dismissed." The finding was forwarded from South America to the Secretary of the Navy, not disapproved by the officer, ordering the court. On Jan. 28, 1869, the Secretary wrote Mr. Bellows: "In consequence of the facts appearing upon the record of the court-martial you are dismissed" It requires no great stretch of imagination to call this an approval of the recommendation of the court-martial that Bellows be dismissed. But the Navy Department held on reviewing the case 10 years later, that the Secretary's letter "does not profess to be the approval of the court-martial; it indicates an intent to exercise the power of dismissal which did not then exist, and not an intent to approve and to direct to be carried into execution, the sentence of the court-martial." (16 Op. 312). Under sec. 1624 (Art. 53) and 1547 R. S., Bellows' sentence of dismissal had both to be confirmed" and ordered by the President to be "carried into execution," just as a jury's verdict, after being approved by the court must be followed by the judge's own personal orders to execute such sentence as the statute authorizes. Sec. 261 of the Regulations designated in Smith v. Whitney, 116 U. S. 180.

In 1868, Lieut. Leavy was by direction of the President retired from active service on pay. In 1869 by direction of the ensuing President the order retiring him from active service was amended so as to wholly retire him and his name was directed to be omitted from the Army Register. In 1878 the latter order "wholly retiring" was declared void. The Attorney-General in 1888, held (19 Op. 209) "the President had power, upon the finding, to place the officer on the retired list either with his pay or to wholly retire him. Having once acted under that power it was exhausted. (19 Ct. Cl. 528; 88 Ill. 470 to 475.) The order of the President 'wholly retiring' was void for want of authority." In this case it will be observed that the Department twice revised its own decisions though during former administrations.

The Supreme Court, in deciding that Major Runkle was "on the retired list", though Army Registers did not confess it (122 U. S. 555), substantially held that the War Department could and should have revised its own erroneous action during a past administration and obeyed the law. As Senator Lodge has frequently written in his magazine histories, "Nothing is settled until it is settled right."

GEORGE F. ORMSBY.

Washington, D. C.

EASTERN FREIGHTS.

Messrs. Funch, Edye & Co., New York, furnish the RECORD with the following eastern freight report.

Whilst the volume of business transacted during the week has been on a much larger scale than has been the case recently, the rates obtained in most instances indicate little or no change. The only charter reported for grain shows a further decline of 1½d per quarter from the last rate paid from the A lantic ports. Future business in this direction is entirely neglected and there is little or no indication of any demand for grain tonnage. The few fixtures reported for cotton from the Atlantic Coast is evidence of the tardy movement of this staple and business seems only practicable on a "hand to mouth" basis. There has been a little more activity in chartering for deals at improved rates which, however, are counteracted by the restriction relative to carrying of deck loads late in the season. The few charters reported for timber are mostly at slightly reduced figures. Further business has also been consummated for the carrying of coals from this coast at rates ruling for some little time past.

With the exception of a further decline in case of petroleum rates to the far East, the market for sail tonnage remains quiet and barely settled in the absence of business of consequence.

Grain to Liverpool 1½ cents, London or Glasgow 2 cents, Rotterdam Amsterdam 4 cents.

A TREASURY DECISION.

MASTERS AND MATES.

Masters and mates of sail vessels and barges of over 100 tons not entitled to act as such on sail vessels over 700 tons not carrying passengers.

TREASURY DEPARTMENT, October 1, 1901.

Sir: This department is in receipt of your communication of the 25th ultimo, in which, referring to the act of December 21, 1898, "requiring masters and chief mates of sail vessels of over 700 tons, and all other vessels and barges of over 100 tons burden carrying passengers for hire", if a master or mate holding only a license to act in such capacity on vessels of over 100 tons, carrying passengers for hire, can under that license act in like capacity on vessels over 700 tons when not carrying passengers for hire?"

In reply, you are informed that as distinctly different forms of licenses are required upon sail vessels of 700 tons and over from those issued to masters and mates of vessels and barges of 100 tons and over, carrying passengers for hire, persons holding masters' and mates' licenses for the vessels last described could not act on sail vessels of 700 tons and upward, except after passing successfully the examination required of officers of such vessels, and having their licenses indorsed by the local inspectors to that effect.

Respectfully,

O. L. SPAULDING, Acting Secretary.

MR. WM. H. THORNLEY, San Francisco, Cal.

QUARTERLY SHIPBUILDING RETURNS.

TREASURY DEPARTMENT, OFFICE OF THE COMMISSIONER OF NAVIGATION, September 30, 1901.

The Bureau of Navigation reports 393 sail and steam vessels of 68,395 gross tons built in the United States and officially numbered during the quarter ended September 30, 1901, as follows:

	WOOD.				STEEL.				TOTAL.	
	SAIL.		STEAM.		SAIL.		STEAM.			
	No	Gross.	No.	Gross.	No	Gross.	No.	Gross.	No.	Gross.
Atlantic and Gulf	174	17,756	74	6,669	1	235	12	15,498	261	40,158
Porto Rico	1	7	.....	.....	.....	.....	.....	.....	1	7
Pacific	14	8,272	16	2,395	.....	.....	.....	.....	30	10,667
Great Lakes	5	149	36	1,649	.....	.....	8	12,240	49	14,038
Western Rivers	6	114	44	3,368	.....	.....	2	43	52	3,525
Total	200	26,298	170	14,081	1	235	22	27,781	393	68,395

During the corresponding quarter ended September 30, 1900, 308 sail and steam vessels of 88,790 gross tons were built in the United States and officially numbered, as follows:

	WOOD.				STEEL				TOTAL.	
	SAIL.		STEAM.		SAIL.		STEAM.			
	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.
Atlantic and Gulf	129	18,880	51	4,095	3	3,360	7	10,192	190	36,527
Pacific	10	6,748	16	3,861	.....	.....	2	293	28	10,902
Great Lakes	5	108	18	482	1	2,790	8	33,677	32	37,057
Western Rivers	16	297	42	4,007	.....	.....	.....	.....	58	4,304
Total	160	26,033	127	12,445	4	6,150	17	44,162	308	88,790

MONTHLY SHIPBUILDING RETURNS.

The Bureau of Navigation reports 139 vessels of 20,065 gross tons were built in the United States and officially numbered during the month of September, 1901, as follows:

	WOOD.				STEEL.				TOTAL.	
	SAIL.		STEAM.		SAIL.		STEAM.			
	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.	No.	Gross.
Atlantic and Gulf	75	4,654	29	3,866	.....	.....	5	5,908	109	14,428
Porto Rico	1	7	.....	.....	.....	.....	.....	.....	1	7
Pacific	6	4,048	3	480	.....	.....	.....	.....	9	4,528
Great Lakes	2	42	1	81	.....	.....	.....	.....	3	123
Western Rivers	.....	.....	17	979	.....	.....	.....	.....	17	979
Total	84	8,751	50	5,406	.....	.....	5	5,908	139	20,065

The largest steel steam vessels included in these figures are:
Denver, 4,549 gross tons, built at Wilmington, Del., owned by Harlan & Hollingsworth Co.

THE steamer Lucania, which sailed from New York on Sept. 21 for Liverpool and arrived there on Sept. 27, reports having communicated for two hours with the steamer Campania in midocean by means of the wireless telegraphy. Many messages are reported to have been exchanged up to a distance of 65 miles.

SHIPBUILDING IN CANADA.

The Toronto Globe publishes some interesting statements recently made by the Hon. W. S. Fielding, Minister of Finance of Canada, to one of its representatives on the subject of shipbuilding in Canada. In reply to a question as to whether he regarded the establishment of the steel shipbuilding industry as of vital importance to the development of Canadian commerce, Mr. Fielding said: "I think the possession of a considerable fleet of steel ships is of the utmost importance to Canadian trade. If we can build them ourselves, so much the better. The carrying trade of the world remains to be done, as before, and we know we cannot do much with wooden ships. There has been during the last two or three years a revival of wooden shipbuilding along our coast, but the vessels in nearly all cases have been of small size. For fishing vessels, and occasionally special service in the carrying trade, where larger tonnsge is needed we shall still find employment for our wooden shipbuilding industry, but if we are ever to engage in the carrying trade of the world, of which we formerly had so large a share, we must have steel vessels to do it. It would be better that we should buy them abroad than to be without them, but it would be still better to build them ourselves, if that would be feasible, and I have a strong hope that we shall gradually do so."

To an inquiry as to the progress of the proposed fast line service, the Minister replied: "There is hardly anything that can be said for publication at present. Be assured, however, that the matter has not been neglected. It has been very carefully considered by the Government, and we have been in communication with a number of parties who are interested in it, and also with the Imperial Government, who were partners with us in the former scheme. The last year or two has not been a favorable time for government action except in the way of inquiry. The great shipyards of the mother country have been very busy, and shipbuilding has been costly. Conditions are becoming more favorable, and responsible shipping men, who would not have looked at the project a year or two ago, are now disposed to take it. While I am not at liberty to say more at present, I feel assured that at an early day such action will be taken as will assure us a steamship line between Great Britain and Canada of which the Dominion may be proud.

MARITIME LAW.

Marine Insurance — Contract — Modification by Course of Dealing.—Libelant exported large quantities of dental goods of its manufacture, and for more than thirty years carried an open marine cargo policy, issued by respondent, renewed from time to time, without any change in its provisions. Such policy was not one covering all shipments made by libelant, nor requiring it to insure all shipments made by libelant, nor requiring it to insure all shipments thereunder, but contained the following provision: "No risk to attach to the policy until the amount and description of the same shall be approved and indorsed thereon by the company, and to be valued at the sum so indorsed." It also provided that the premium should be agreed upon at the time of such indorsement. By a course of dealing between the parties extending over many years, and adopted for mutual convenience, owing to the large increase in libelant's business, no indorsements were made on the policy, but each risk was reported by libelant on a slip furnished by respondent, and they were entered by respondent each month in a pass book which it also furnished. Such slips were filled out by libelant and sent by mail after it received the bills of lading, and were often not received by respondent until the shipments had been several days at sea, and sometimes not until after they had arrived at the port of destination, although it did not appear that such fact was known to respondent. During such time no risk so reported had ever been rejected on account of any objection thereto. Neither was the premium agreed upon at the time of each shipment, but respondent furnished libelant from time to time with a schedule of rates which governed as to future shipments. Held, that there was nothing in such course of dealing which abrogated the vital provision of the policy retained in each renewal, requiring each risk to be approved before it should attach, or which bound respondent to approve a risk the report of which was not received until after it was known that the shipment had been lost, it not appearing that it had ever done so previously; the fact that it had never rejected a risk being evidence merely that such risks had all been acceptable. Delaware Ins. Co. of Philadelphia vs. S. S. White Dental Mfg. Co., 109 Fed. Rep. (U. S.) 334.

LAKE SUPERIOR WATER LEVELS.

The stage of Lake Superior in September, 1901, by the U. S. gauge at Houghton, Mich., as tabulated by J. H. Darling, U. S. Assistant Engineer, Duluth, was 1.32 feet above low water datum. This is 0.15 ft. lower than for the preceding month. Usually the lake is stationary from August to September.

The rainfall at Duluth for September was 2.30 inches, as reported by U. S. Forecast Officer Richardson, which is 1.28 less than the normal for September. If similar conditions prevailed over the entire lake it would account for the fall noted in the lake's surface.

The stage of water last month was 0.39 ft. lower than in September a year ago, but was 0.48 ft. higher than the averge September stage for a period of 26 years, from 1872 to 1897.

STATISTICAL REPORT OF LAKE COMMERCE.

THROUGH CANALS AT SAULT STE. MARIE, MICHIGAN AND ONTARIO, FOR THE MONTH OF SEPTEMBER, 1901.

EAST BOUND.

Articles.	U. S. Canal.	Canadian Canal.	Total.
Copper, net tons	10,286	784	11,070
Grain, bushels	1,801,751	386,463	2,188,214
Building stone, net tons	8,380	470	8,850
Flour, barrels	835,755	104,817	940,572
Iron ore, net tons	2,542,138	84,775	2,626,913
Iron, pig, net tons	2,455	....	2,455
Lumber, M. ft. B. M.	163,447	1,826	165,273
Silver ore, net tons	....	....	....
Wheat, bushels	6,577,022	1,391,146	7,968,168
Genl. Mdse., net tons	6,218	2,978	9,196
Passengers, number	2,571	1,512	4,083

WEST BOUND.

Coal, hard, net tons	125,552	15,200	140,752
Coal, soft, net tons	574 381	20,121	594,502
Flour, barrels	165	....	165
Grain, bushels	500	....	500
Manf'd iron, net tons	20,349	204	20,553
Salt, barrels	63,879	11,700	75,579
Genl. Mdse., net tons	46,747	10,943	57,690
Passengers, number	2,651	1,511	4,162
Freight:			
East bound, net tons	3,155,191	153,046	3,308,237
West bound, net tons	776,636	48,183	824,819
Total freight, net tons	3,931,827	201,229	4,133,056
Vessel passages, number	2,327	492	2,819
Reg'd tonnage, net tons	3,342,113	222,129	3,564,242

Compiled at St. Mary's Falls Canal, Michigan, under direction of Lieutenant-Colonel G. J. Lydecker, Corps of Engineers, U. S. A. Joseph Ripley, Assistant Engineer and General Superintendent.

THE latest return of the shipping built and building, owned and managed by Messrs. Elder, Dempster & Co., of Liverpool, shows that the total number of ships under the control of the firm is 141 vessels, with a gross tonnage of 368,400 tons gross. There are twelve steamers building of 44,800 tons gross. In speed the figures are as follows: 17 knots, 1; 14 knots, 11; 13 knots, 7; 12 knots, 12; under 12 knots, 110. Messrs. Elder, Dempster & Co., occupy the proud position of being in possession of the largest fleet of cargo and passenger steamers under the British flag. There are, however, two foreign lines—the Nord-deutscher Lloyd and the Hamburg-American line—which exceeds in tonnage the Elder, Demster fleet, but at the pace the English firm is traveling it will soon top the German companies.

NIAGARA is a young river. G. K. Gilbert, of the United States Geological Survey, explains that it came into existence after the glacial epoch. The cataract has sawed a slot seven miles long, moving back four or five feet each year. This would make the river 7,000 years old. But the falls have not always been so high, nor the crest lines so uniform, nor the volume of water so great. From this it would seem that the river may be anything from seven thousand to a hundred thousand years old. No more exact computation can be made.

SHIPPING AND MARINE JUDICIAL DECISIONS.

(COLLABORATED SPECIALLY FOR THE MARINE RECORD.

Salvage—Award.—Where a tug hauled a ferryboat out of a slip at the time when danger from a fire appeared threatening, and it was an act of prudence to move such boat some distance away, an award of salvage of $200 will be granted, the tug itself being in no danger, and the service being neither prolonged nor laborious. The John I. Brady, 109 Fed. Rep. (U. S.) 912.

Libel for Sinking Boat at Dock—Laches.—The conduct of the owner of a canal boat sunk at a dock by the swell from a passing steamer, in taking no measures to raise her, and in making no claim against the steamer for two years thereafter, is a matter which may be properly considered as casting suspicion on the merit of the claim that the loss was due to the steamer's negligence. The New York, 109 Fed. Rep. (U. S.) 909.

Duty of Care in Navigation.—In the navigation of the Hudson river, which is open to all craft, it is as much the duty of boats which from their size, shape, or unseaworthy condition are unable to safely withstand the ordinary perils of such navigation, such as the swell caused by large steamers, to avoid placing themselves in exposed positions, as it is of such steamers to exercise care as to their rate of speed. The New York, 109 Fed. Rep. (U. S.) 909.

Charter—Warranty of Seaworthiness.—A warranty of seaworthiness at the commencement of the voyage is implied from the owner's agreement to insure and from the obligation put on the charterer by the charter "to return the yacht," or "to pay any loss or damage sustained by her not covered by the policy of insurance;" the policy, in absence of a showing to the contrary, being presumptively wholly avoided by the yacht's unseaworthiness. Ronalds vs. Leiter, 109 Fed. Rep. (U. S.) 905.

Negligent Navigation — Evidence Considered.— Evidence held insufficient to sustain the allegation of a libel that the loss of a canal boat, which was crushed between a dock and other craft moored outside of her, by the force of the swell caused by a passing steamer, was due to the negligent speed of the latter, but to show that the steamer was properly navigated, and the fault was that of the canal boat, which was old and unseaworthy, and heavily loaded, and was removed from a place of safety, and placed in a dangerous position, next the dock, close to a narrow channel in the Hudson river, with two other loaded boats outside, at a time when it was known that the steamer would soon pass. The New York, 109 Fed. Rep. (U. S.) 909.

Interstate Commerce—State Laws Affecting—Imposing License Fees on Interstate Ferry.—A state has no power to exact a license fee for the operation of a ferry for the transfer of railroad cars across a navigable river between a point within such state and a point in another state, where the corporation owning and operating such ferry is a citizen and resident of the latter state, and the vessels employed have their situs in such state for purposes of taxation, and the only property of the company within the state seeking to impose the license consists of its landing place and facilities. As applied to such case, the license fee is a direct burden upon interstate commerce. St. Clair County vs. Interstate Car-Transfer Co., 109 Fed. Rep. (U. S.) 741.

Charges for Towage—Charter Hire.—The vessel, though warranted seaworthy at the commencement of the voyage, not having been so, and having broken down from that cause, and the charterer having then abandoned use of her for charter purposes, but repaired her and returned her to the home port, and paid for the repairs, and having been charged for the vessel at charter rates till her return, which together exceeded what it would have cost to tow her, the owner, on appeal, cannot complain that the charterer was allowed what it would have cost to have towed her back, the owner, in addition to demanding her return, having written that he would not be responsible for repairs or towage. The charterer, not having appealed, cannot now object to the charge allowed on the trial for charter hire after the breakdown. Ronalds vs. Leiter, 109 Fed. Rep. (U. S.) 905.

Review on Appeal.—A steamer worth $40,000 grounded on a bar at the entrance to a bay. The sea was rough over the bar, and the steamer lost her rudder. Although she succeeded in getting off the bar, her anchors failed to hold, and she was again driven upon it, and was pounding and leaking when, in response to her signals of distress, libelants' tug came to her aid. The tug pulled her from the bar, towed her to a place of safety, recovered her rudder, and thereafter rendered other services in assisting in her repairs and towing her to her port of destination. The tug put forth no extraordinary effort, and neither she nor her crew were subjected to unusual peril. The tug was valued at $25,000. Held, that an award of $1,000 for the salvage services, made by the District Court, while lower than would have been justified, in view of the value of the vessels and the peril of the steamer, would not be disturbed on appeal. Simpson et al. vs. Dollar et al., 109 Fed. Rep. (U. S.) 814.

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UNITED STATES SHIPPING.

Under the title "The Need for American Ships," Mr. Eugene Tylor Chamberlain, United States Commissioner of Navigation, has contributed the following article to the newspapers:

In his last great speech at Buffalo, President McKinley dwelt upon several lines of policy which he declared the nation should pursue in the future, and one of these was the development of our merchant marine, and President Roosevelt, since his accession to office, has affirmed his adherence to the same view. The policy thus declared refers particularly to ships on the ocean engaged in foreign trade. American shipping, in this sense is a national institution, or as affirmed by our supreme court, "a national service." The American ship not only carries the country's flag, but for the time being and to the extent of its deck, actually extends national territory up to the jurisdiction of the foreign nation in whose harbor it anchors. Exports, such as corn, cattle, steel beams, sewing machines and bicycles, forthwith become merged into the things of the foreign country into which they are sent. Outside of American books—encouraged by national and international copyright— I recall no thing, except the American ship, which takes with it to foreign territory its American nationality and keeps it. It is both narrow and incorrect, therefore, to put any project to develop American shipping on the same plane as a bill to establish the tin-plate industry, or to promote the importation of cheaper woolen clothing, or to encourage the exportation of dairy products. All of these will concern special industries, and only indirectly and remotely effect the general growth. The development of shipping is primarily national. Even in secondary results, it reaches directly many more forms of human activity—of which shipbuilding is but one—than any other industry now recalled.

The influence of Great Britain in shaping the world's history and growth—an influence entirely out of proportion to her population and natural resources—has radiated through her merchant shipping. Through it the English language and Anglo-Saxon ideals and methods have pervaded the world. We have only lately come to the last chapter in the history of an earlier dominion of the world which Spain held by virtue of her navigators and her ships. "Our future lies on the sea," the watchword of the Kaiser, tersely expresses the laudable ambition of Germany to attain leadership among nations. It is not an unworthy ambition to aspire to be the most powerful nation in the world, the most pervasive influence in shaping mankind's future. It is a proper ambition for Americans to entertain at the beginning of the twentieth century.

If, as we believe, our national ideas and purposes are pure and elevated, the extension of American shipping will carry with it not merely an increase of trade and an increase of wealth, but also an expansion of forces working for the general welfare of the world. Like other nations, we are now sending our warships to foreign ports "to show the flag." The propriety of this course does not admit of question. The flag above the muzzles of steel guns, however, cannot consistently with our purposes or our industrial rank continue to be the only display of American colors in foreign ports. Even army transports and navy colliers, peaceful in their way, will hardly suffice as our permanent representation on the sea. What may be termed our industrial independence happens to have been attained almost simultaneously with the acquisition of Hawaii, Porto Rico and the Philippines, and our inevitable appearance in the commercial politics of Asia. The opportunity to become a maritime commercial power and the necessity for becoming such have arrived together. There is now no real question as to the need for American ships in the minds of the leaders in practical affairs in this country. That need is disputed academically by some on whom traditional theories have so strong a hold that they have not yet adjusted themselves to the principles which must govern the nation's course during this century. A relatively small but influential number find it to obvious self interest to dispute such need. Each class may have done something to confuse the issue and retard action thus far, but both together will scarcely be able long to keep the United States in its painfully absurd position on the sea.

It is a political necessity for the United States to carry all its mails to Northern Europe, Asia and Australia by American mail steamers, precisely as all the mails of England, Germany and France to the United States, Asia and Australia, are carried by the mail steamers of each nation respectively. It is a political necessity for the United States to carry its mails to South America by American mail steamers, precisely as the mails of England, Germany and France are carried to Africa by mail steamers of each nation respectively. The service is national and should be intrusted to agencies at all times under national control. Foreign ships owe and perform their first duty to the nation whose flag they fly. Whatever may have been formerly the case, we are no longer so small, weak or poor that we must bargain to get our letters carried as an incident to a British, German or French mail contract by auxiliary cruisers of British, German or French navies, officered and manned by their naval reserves. We do not, of course, apprehend war with these three powers, but that is no good reason why we should help to support their auxiliary sea forces, particularly as those three navies are the only ones, except the Russian, which our own navy does not already much outrank. Congress every year votes more money indirectly to support the British naval militia than it does for the national guard of any one of the great states of the union. By the muddy waters of improved south-western rivers men are denying the usefulness in war of auxiliary merchant cruisers and their seamen. This year England has increased her list of such auxiliary cruisers from 28 to 50, and Germany is doubling hers. It is a case where "the shallows murmur, but the deeps are dumb."

National policy requires that our mail steamships should be built in home yards by home labor. The requirement has been recognized by every nation of the first rank as soon as its industrial growth permitted. The plant, the machinery and the skilled mechanics needed to build these ships are part of a nation's scheme of defence. Next to having a most powerful navy is the ability to construct one when required. It is to the national interest that such ships should be officered and manned, so far as practicable, by American citizens, constituting in effect a naval reserve. Federal appropriations to create a body of merchant seamen would stand more firmly on constitutional grounds than federal appropriations to arm the militia. The latter can be done through the agency of the states. The former, by our scheme of government, can effectually be done only by federal authority. These propositions concededly set commercial principles at defiance. Our mails can be carried more cheaply by foreign than by American steamers. Ships cost less in England than in the United States. British seamen may be had for about half, and German and French seamen for less than half the wages American seamen are paid. The proposition cannot be debated on the basis of the cash balance of receipts and expenditures, for only the latter can be put down in dollars and cents. The British, German and French ocean mail service are conducted at an annual loss of millions. Like many other national needs, the need for American ships can be supplied only by the expenditure of national money without return in kind.

With obvious qualifications, what has been said of American mail steamers applies to other American vessels. Their relations to the whole nation are less direct, and, based on those relations, less expenditure proportionately is warranted. The number, speed, size, regularity and large crews of a country's ocean mail steamers indicate its greatness in a manner cargo steamers or sailing vessels cannot. With the cargo steamer and sailing vessel, the national element is secondary to the commercial. Such vessels concern mainly the grazing, grain, cotton, lumber, coal and oil producing states. A nerican mail steamers concern those states with all the union and all its interests. The commercial phases of the need for American ships are important, but outside the scope of this article. The cool judgment of the country less than twenty years ago directed the beginning of a program of naval construction, since consistently developed and carried out. In that short time the United States has risen from almost no rank to be the fourth naval power of the world. Meanwhile, American ships, relatively and absolutely, haev been decreasing. Our shipping in foreign trade is about one-third smaller than when the Chicago and Atlanta were laid down. The increase in our tonnage has been of vessels seldom, if ever, a day's run distant from the protection of our shore batteries.

The future sea power of the United States, mercantile and naval, depends upon an intelligent response to the need of American ships. The eminent writer upon the new navy asks and answers the question of commercial and military interdependence: "Can this navy be had without restoring the merchant shipping? It is doubtful. History has proved that such a purely military sea power can be built up by a despot, as was done by Louis XIV; but though so fair seeming, experience showed that his navy was like a growth, which, having no root, soon withers away."

IRON AND STEEL TRADE.

The iron market is not as active as it was a week ago, but the feeling is firm all around and prices are unchanged. All the furnaces are sold up for the year on foundry iron and there does not seem to be any rush to take up business for 1902. Some sales of ore were made during the week to fill out and prices are the same as they have been for several weeks past. Carrying charges are unchanged. The scarcity of cars on the ore and coal carrying roads has tied up considerable tonnage, and the indications are that shippers will not be able to bring down as much ore as they figured on. Vessels that have ore for direct shipment have in some cases been held in port for over a week. Most of the contract boats are behind and some of them will not be able to carry all the ore that they were chartered to move.

In its review of the iron and metal trades the Iron Age of New York says: Despite the talk in some circles that higher prices may be forced, the feeling with some of the largest is that values are now as high as is reasonable. In fact, the belief is more and more frequently expressed that we are on the crest of the wave and that we will do well if we maintain the present level.

Some of the large interests are apparently seeking with vigor for large contracts for next year's delivery, and for such back log orders current quotations for immediate delivery are of very little account. In steel, for instance, materially lower prices are made for 1902. Probably any pressure to market product, should it develop toward the close of the year, would be first witnessed in an effort to stimulate the export demand. As yet, there is not the slightest sign of this. It will take months to fill the gaps in stocks of those finished lines which were affected by the strike, and in other branches, notably in structural material, deliveries are only now beginning to show some improvement. But in other departments the evidence of slackening in the demand is becoming somewhat more emphatic.

In pig iron further purchases of Bessemer and Basic in the central west by the leading interest are reported, but there have been some signs of unexpected weakness in the east, under the temptation of a few really good orders.

Our monthly blast furnace statistics show a moderate increase in the capacity of the plants active on the first of this month. This is due principally to the resumption of a few stacks idle owing to the strike, and to the starting of the new blast furnace of the Sharon Steel Co. Taking it altogether, we have now for months been running very close indeed for safety. It is very doubtful whether there are two weeks' stock of pig iron in producers' hands, which is a very narrow margin to provide against accidents or contingencies, particularly since consumers are carrying very little pig iron.

RIVER AND HARBOR CONVENTION.

The rivers and harbors convention adjourned sine die on Wednesday after adopting resolutions embodying its sentiments with regard to congressional appropriations for the improvement of waterways. Congress was urged to take speedy action in the matter of the construction of an isthmian canal. The place of meeting for the next congress was not decided upon. Invitations were received from Beaumont, Tex., and St. Louis, Mo.

An incident of the session was the ruling out of a resolution of confidence in President Roosevelt, offered by A. R. Smith, of New York, who asked that it be adopted without reference to the committee. Objections were raised on the ground that the resolution was not germane, and it was referred to the committee, who failed to report upon it.

After the adjournment the members took an excursion to Annapolis and other points on the Chesapeake bay and were tendered a banquet on board of the steamer.

The resolutions are as follows:

"Resolved, that this congress asserts that the best development of our national resources demands the adequate improvement of our waterways; and therefore it indorses and urges upon the Congress of the United States a liberal policy in their improvements, through systematic and adequate appropriations therefor. This congress deplores and condemns any action which leads to the failure of rivers and harbors legislation.

"Resolved, that it is the sense of this congress that the improvement of rivers and harbors is fully as important as the work carried on by any department of the general government, and for this reason we urge that appropriations therefore be placed upon such a footing as will insure at all times ample fnnds for a vigorous prosecution of the work; and to this end we indorse the system of continuing contracts.

"Resolved, that in the judgment of this congress all items should be excluded from the rivers and harbors bill that do not appertain to the improvement of harbors and waterways for the purpose of waterborne commerce.

"Resolved, that the wonderful prosperity of our country is largely due to the vast increase in our foreign commerce, and that to advance our position as a great commercial nation all possible facilities must be afforded, deeper and wider channels must be created to meet the requirements of modern steamships that have revolutionized the commerce of the world.

"Resolved, that our great systems of international navigation by the lakes and waterways of our country, besides being so essential as great highways of commerce, to the fullest development of national resources, are effective regulators of freight rates, and we therefore urge their continuous and systematic improvement, with liberal appropriations therefor.

"Resolved, that an executive committee of seven be appointed by the president of this congrees, representing the different sections of the country, who shall have general charge of the affairs of this congress, with power to convene future meetings, and to perform such other duties as may be necessary to carrv into effect the purposes and objects of its organization.

"Resolved, that the foregoing resolutions be formally submitted to the appropriate committees of Conpress, at its next session, by a committee, consisting of one delegate from each state, to be appointed by the president of this congress, who shall be ex-officio a member of the committee."

THE NEWHALL CHAIN FORGE & IRON CO., Havemeyer Building, New York, issues a neat form of certificate giving particulars of tests to which their product in chains is subjected. They use a testing machine of 600,000 lbs. capacity, which is licensed by the London Lloyds and approved by the United States Government. The certificate of test shows weight, length, size, etc., of chain, with breaking strain. Every link of the Mushet steel loading and skidding chains made by this company is subjected to test. Ten ft. in every 400 ft. is cut from a chain and submitted to a breaking strain to insure uniformity of strength. Chain makers are paid by the day for this grade of chain, in order to secure perfect workmanship, one man makes a chain from end to end; that is to say, it is not pieced out to different fires and then joined together. This is done to insure uniformity of heating and welding, which are all important in the make up of a perfect chain.

INSPECTED THE LIGHT-SHIP KEWAUNEE.

Several members of the Lake Carriers' Association took a trip to Southeast Shoal, Point au Pelee Passage, on Sunday morning on the gunboat Hawk and inspected the light-ship Kewaunee, which is being maintained by the Lake Carriers. Everything on board the light-ship was found to be in a most satisfactory condition. The light-ship carries three lamps so arranged as to make a single blended light visible from all points of the compass. She is equipped also with a powerful whistle for signaling in foggy weather. The light-ship is anchored in 6 or 7 fathoms of water and all vessels should pass to the south of her. A few have passed to the north, but have come so close as to nearly foul her anchor chain. There is good water all about her to the south and there is no reason why vessels should attempt to hug her in passing. The fitting out and purchase of this vessel has cost the Lake Carriers' Association about $14,000 so far. Its maintenance, exclusive of repairs, is costing about $250 per month. The United States Light-House Board is now considering the advisability of building either a light-house or maintaining a light-ship upon this shoal and thus relieving the Lake Carriers' from supporting what is purely a governmental burden. Capt. George P. McKay, chairman of the committee on aids to navigation, has furnished the government officials with all the necessary facts in the case. A light-house would, of course, be preferable to a light-ship upon this shoal, but there is some question as to whether the nature of the bottom would permit a foundation to be built upon it. The passage is in Canadian waters, which explains the indifference manifested by the United States government to its dangers. However, as the Canadian government already maintains lights in American waters frequented by its ships, the American government should maintain a light upon this passage, as the commerce which utilizes it is almost wholly American.

CHICAGO FREIGHT OUTLOOK.

Messrs. C. W. Elphicke & Co., Chicago marine under writers and vessel agents, report the condition of the freight market as follows:

We quote detailed stocks of grain in store at Chicago and South Chicago on the dates mentioned.

	Oct. 7, '01.	Sept. 9, '01.	Oct. 8, '00.
Wheat	9,289,000	7,608,000	19,997,000
Corn	10,950,000	11,473,000	4,460,000
Oats	4,128,000	3,351,000	6,538,000
Rye	346,000	306,000	534,000
Barley	31,000	32,000	178,000
Total	24,744,000	22,770,000	31,707,000

Rates continue firm at 1¼ cents corn and 1⅜ cents wheat to Buffalo, with about enough tonnage to satisfy the demand. There is considerable enquiry for corn room for Georgian Bay at ⅛ of a cent over the Buffalo rate, with practically no vessels seeking cargoes in that direction.

Coal is not coming in any more freely than at any time heretofore this season, and we think it will be necessary for coal shippers to make another advance in rates in the very near future in order to bring the tonnage this way. We feel confident that this advance will be paid very shortly.

THE Ajax Metal Co., of Philadelphia, submits the following data concerning a test of Ajax plastic bronze, made in the rolling mill of Hughes & Patterson, Philadelphia: "Test made on hot bar mill, placing Ajax plastic bronze brass on one end and phosphor bronze brass on opposite end: Nov. 15, 1900, brasses placed in position measured ⅞ inch in thickness. Feb. 27, 1901, brasses taken out, phosphor bronze then measured ⅜ inch and plastic bronze ⅝ inch. Phosphor bronze brass, being worn down to useful limit, was discarded. Feb. 27, 1901, new phosphor bronze brass placed, original plastic bronze bearing being used. Apr. 29, 1901, again taken out. Second phosphor bronze brass worn down to useful limit, ⅜ inch, while plastic bronze still measured 7/16 inch, thus showing a saving of over 100 per cent. in favor of Ajax plastic bronze.

THE River and Harbor Convention ended its deliberations at Baltimore Wednesday and adjourned sine die. The only incident of note was the practical squelching of a resolution expressing confidence in President Roosevelt, which, instead of being adopted at once, was referred to a committee, much to the displeasure of those who favored its immediate passage. This action was the result rather of a disagreement among some of the delegates than a disinclination upon the part of the members to adopt it.

THE AMERICAN SHIP BUILDING CO.

Those who are in possession of inside information, says the Cleveland Leader, make the assertion that the American Ship Building Co. is financially one of the strongest industrial combinations of the time. Its status is not, so the statement goes, adequately represented in the dividend of the equivalent of 7 per cent. on the preferred stock issued a short time ago. The company is in possession of enough funds to have paid a handsome dividend upon the common stock, and was only deferred from doing so by the necessity for establishing a sinking fund to provide against emergency. Those who are in control of the financial policy of the company are of the belief that its future security, and its continued high standing in the financial world is of more importance than a division now with the common stockholders. This division, however, it is claimed, is only deferred rather than omitted entirely. The present financial strength of the company is not unexpected. The company did more business on the chain of lakes last year than was ever done by all of the shipyards combined, when competition was the rule, and every shipyard was producing to the limit of its capacity. Added to this, by economy in operating and by a centralization of control, the company was able to greatly rednce the expenses. Then, too, the company has always been able to get a fair price for its boats, and by clever maneuvering on the part of the buyers of the steel of which the boats were made the cost of the boats was based on the price at which the material was to be purchased of the steel mills. Avoiding heavy losses in this way contributed largely to the satisfactory net earnings of the company.

LETTERS AT DETROIT MARINE POST OFFICE.

OCTOBER 9, 1901.

To get any of these letters, addressees or their authorized agents will apply at the general delivery window or write to the postmaster at Detroit, calling for "advertised" matter, giving the date of this list and paying one cent.

Advertised matter is previously held one week awaiting delivery. It is held two weeks before it goes to the Dead Letter Office at Washington, D. C.

Anderson, Wm.—2, Shaw
Bock, E. T., Iron King
Baker, John, Frank Peavy
Brumund, Henry, Sparta
Brian, Thomas
Bullock, James
Bourkland, John
Brown, C. A.
Bramell, Benj., Sagamore
Boyer, Arthur, Sagamore
Bell, Will, Sitka
Barkey, Peter
Backens, Kemi, Penobscot
Cantwell, John, Pathfinder
Cran, G., S. C. Hall
Collier, Frank
Clifford, John
Carpenter, Wm.
Cunningham, Jno., Tyrone
Davis, Phebie
Danners, Richard
English, Edward, Neilson
Elsworth, Geo. S.
Goodwin, A., J. J. Hill
Graham, Fred M., Armenia
Green, Joe—2, Hurlbut
Grose, Otto, Hoyt
Grashan, Nelson, Vance
Hart, James, Roman
Horton, S., Sacramento
Hazzard, Robt., Choctaw
Harres, John
Harkness, C. W., Peerless
Hartman, Gus, Albright
Hawkins, Turner E.
Jones, H. H., Iroquois
Johnson, T.
Johnson, Chris, Queen West
Kinney, Chas.
King, H. S., Iroquois
Lutman, Henry—2, Peavey
Lewis, P. L.
Lamson, Capt.
Latta, C. H., Hoyt
Morris, Joseph
McLennan, Alex.
McGaw, O. J.
McGregor, C. C., Yuma
McLeod, W. A.—2, Peavey
McAvoy, Jos.
McKay, D. T.
O'Connor, Thomas
Poole, Harry—3, Glasgow
Pollock, Fred—2
Paquette, Mrs. Wm.—2, D. C. Whitney,
Pigott, Thos., Peerless
Pursell, Wm.
Price, Mrs. Sarah
Quigby, Thomas P.
Rowan, Robt., Mahoning
Rand, John—3, Ida E.
Rening, Peter, Hudson
Rowland, Wm., Colgate
Renney, Chas., City of Rome
Rae, Geo.
Stevens, C. J., Lockwood
Stack, Adeline, German
Samson, A. A., Matoa
Stewart, Harry, Marina
Stark, Wm., Peavey
Schroder, T.
Shipley, Harry
Singer, R. W., Shaw
Smith, Henry P., Foster
Scarth, Walter G.
Thorne, Geo., Neosho
Thoman, John, Vance
Vandervield, Peter
Walker, Mrs. Minnie, Casey
Walsh, F. C.—2, Black Rock
Williams, C. P.
Wilson, Geo. B.
Wise, Fred
Wesley, Frank, Roman

F. B. DICKERSON, P. M.

THE Commissioner of Navigation in his quarterly report, published elsewhere in this issue of the RECORD, shows that 393 vessels of all kinds were built in the United States during the three months ended Sept. 30, 1901. Of this number 370 were built of wood and 23 of steel. The total gross tonnage was 68,395 tons. Of the whole number built 261 were built on the Atlantic and Gulf coasts and 49 on the Great Lakes.

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SUPERPOSED TURRETS.

In a letter addressed to Admiral Bowles Mr, Charles H. Cramp records his opinion that open barbettes are preferable to closed turrets, in whose confined and closed space it is impossible to sight or work the guns satisfactorily. He quotes officers who served in turrets during the Spanish War as saying that they would rather have the entire top removed, leaving the turret completely open above. One officer stated that he abandoned the sighting hood in an 8-inch turret at the battle of Santiago and lifted the manhole cover on the top so that he could stand with his body above the waist outside of the turret. Topless turrets are of course impossible in the superposed system. Mr. Cramp calls attention to the letter he wrote to Secretary Herbert in 1895 condemning the 13-inch gun, and urging the adoption of the 12-inch. He presents a long and well-reasoned argument to show that there is no adequate advantage in the increased caliber to justify the necessary increase of 200 tons in the weight of the machinery for moving the 13-inch gun and its mounts over those of the 12-inch and a corresponding increase in the difficulty of manipulation. The tendency in foreign navies is to decrease movable weights in every possible direction. The 12-inch gun, as Mr. Cramp thinks, strikes the happy medium between the desideratum of gunpowder on the one hand and practicable moving weights on the other. Neither the 12-inch nor the 13-inch gun is of much account, in Mr. Cramp's opinion. There is no evidence that in the battle of Santiago either of them hit anything. "Undoubtedly," says Mr. Cramp, "some of the large projectiles hit the island of Cuba, but there is nothing to show that they struck any other object or injured anything." The results at the trial ground, where the gun is mounted on a stable platform, and fired at right angles, is no criterion as to its value when fired at sea from an unstable platform and at an angle of impact which may be anything but a right angle. "Now", concludes Mr. Cramp, "with all these admitted difficulties in the use of large guns in turrets as we construct them, reducing the power of the gun as an offensive factor to an extent that makes practically nothing, I do not see how such a system will be improved by putting the additional weight and height of another turret on top of one already overloaded and cumbersome if not impracticable."

CANAL TO THE COAST.

"The great need of our lake commerce is a deep waterway to the sea," is the title of an article in the October issue of Success. It deals with the need of a canal to connect the Great Lakes with the Atlantic Ocean, and contains signed statements of the situation from the mayors of Cleveland, Chicago, Duluth and Toledo. Mayor Tom L. Johnson, of Cleveland, says:

"It would seem that the United States, with its extensive coast lines on the Atlantic and Pacific, could find locations for a sufficient number of seaports to accommodate its increasing trade. But this is not so. The principal cities of the Great Lakes are looking forward to a salt water service that will carry their vessels to all parts of the world. Cleveland does not intend to be backward in this matter. She stands ready to grasp fortune and time by the forelock, and to promote such projects as will point to a successful waterway to the Atlantic. Such a route is becoming more and more a necessity every day. The vastness of the commerce of the middle western states proclaims that they must have their own routes to the sea. The increase in trade with other countries will make this necessary; trade cannot be allowed to choke the channel of one or two particular ports. If even a comparatively small amount of this traffic can be moved by the employment of steam vessels to prevent a threatened congestion of moving freight, something will have been done to solve a difficult problem.

"The matter of opening a route to the Atlantic is one of the great questions of the day and affords a vast field for the engineer who claims that there is nothing new to be built in this country. It is a virgin field for those who can devise a short and practicable route to the sea. Canada has spent millions of dollars solving this problem, and America should stand ready to spend millions more. It was only last year that the Canadian government announced that vessels not over 260 feet in length, and drawing less than fourteen feet, could pass unobstructed through the canals from the lakes to the ocean. This was the first step in a new undertaking, typical of American progress, that promises to revolutionize the shipping interests of the Great Lakes and add enormously to our commercial wealth."

GRAIN INSPECTION.

At the organization of the Chief Grain Inspectors' Association, completed at Des Moines, Ia., last week, John O. Foering, of Philadelphia, was elected president of the association and John Shanahan, of Buffalo, secretary and treasurer.

The great object of the association, however, is the adoption of uniform standards of samples for the contract grades of grain in the principal markets of the United States. In other words, it is hoped to arrive at a national standard for each grade.

Chief Inspector Shanahan delivered the principal address of the meeting and spoke strongly favoring uniform inspection, which, it is claimed, meets with the hearty approval of the Buffalo Merchants' Exchange. Chief Inspector Shanahan said:

"In the absence of any uniform recognized standards, who can say which is right and which is wrong? The present methods, however, present a condition that is not healthy or desirable to the trade. It is my belief that this can be overcome, in a measure, by the co-operation of the different exchanges and inspection departments in getting together and agreeing on a uniform set of rules and standards. It would seem an authority could be constituted by representatives of these different bodies to set the standards of the different grades, and it should be the duty of each inspector to see that these standards are kept inviolate. Yet in the face of experience, there can be but little hope that such a scheme could be brought into successful operation, for, during the movement of last year's crop, we find in one of our largest wheat producing states, two large markets in controversy over the standards of their respective grades.

"We find in the greatest grain markets of the world an inspection under authority of the state government which is supposed to be and should be the model inspection of the world. And yet the trade find it necessary to support a small army of private inspectors to check the work of this department. I mention these matters to show what a difficult proposition we have on hand in a movement for a universally uniform grading of grain."

A STUDY OF WAVES.

At a meeting of the Royal Geographical Society, with Sir Clements Markham in the chair, Dr. Vaughan Cornish read a paper on "Travels in Search of Waves in 1900." He first showed a number of photographs, taken at various places round the British coast, i. e., Barmouth, the mouth of the Findhorn, Montrose, Mundesley, and the Goodwins, illustrating sand waves, usually about 20 feet from crest to crest, and from 1 foot to 20 inches high. These were found upon estuarine sand banks exposed to strong tidal currents. By photographing the ridges at low water a map might be obtained showing the strength and direction of the tide in any estuary in which circumstances favored their preservation; where, however, the first of the flood tide or the last of the ebb tide ran strongly these ridges were washed flat and the sand-banks dried smooth and featureless. Such sand ridges, which were not to be confounded with the ordinary ripple of the "current mark" on the surface of sand-banks in streams, required for their production a swift current with sufficient depth of water and they originated from the condition of unstable equilibrium which existed when the lower layers of water were fully charged with sand in eddying suspension.

Other photographs illustrated the geometrical patterns of ripple marking produced by the waves, comprising parallel stripes, parallelograms and hexagons, but not triangles of pentagons. There were also pictures of ripples in the clouds, the similarity of which to the sand ripples was well brought out when the negative of the photograph was viewed upside down, and of waves and ripples in snow, taken by the lecturer in Canada. In the North Atlantic he measured some waves 40 feet high during a storm. These were exceptional, but waves of over 30 feet high were common, though the average height was probably not more than 18 feet. He pointed out that it was more important from the practical points of view to know the height of what might be called the "ordinary maximum" wave than merely the average height of big and little waves alike. The discrepancy between these two ways of reckoning might amount to 100 per cent. The principal published records gave merely the average height, which rarely exceeded 28 feet in the heaviest gales. This average, however, was consistent with the occurrence every few minutes of waves of 45 to 50 feet high, which were often reported by sailors and usually discredited by landsmen.

DURING the International yacht race at New York on Sept. 28 the revenue cutter Gresham ran into Sir Thomas Lipton's yacht Erin, and buckled a deck beam and caused something of a commotion aboard the yacht. The collision was unavoidable. The vessels were about three hundred yards apart, which, under ordinary circumstances, was ample distance. Before the Erin could get the direction in which the Gresham was heading the Gresham drifted down upon the Erin. The engines of the Erin had been stopped. Capt. Walker says that some confusion arose from the fact that the racing yachts, soon after turning the stakeboat, headed directly toward the Gresham, the Erin and the neighboring fleet of excursion vessels. The racers headed due north instead of west by north, and the Gresham turned quickly to drive the excursion craft back from the course. Capt. Walker said that Sir Thomas Lipton absolved the revenue cutter captain of all blame. Capt. Walker asked that the bill for repairs to the Erin be sent to him, but Sir Thomas would not consent to do so.

NOTICE TO MARINERS.

UNITED STATES OF AMERICA—NORTHERN LAKES AND RIVERS—MICHIGAN.

TREASURY DEPARTMENT,
OFFICE OF THE LIGHT-HOUSE BOARD,
WASHINGTON, D. C., Oct. 2, 1901.

WHITE RIVER PIERHEAD LIGHT-STATION.—Noti e is hereby given that on September 23, 1901, the white, square, pyramidal, framework tower, upper part inclosed, surmounted by a fixed red, sixth-order light, was moved 100 ft. from its former position to the outer end of the south pier at the entrance to White lake and river, easterly side of Lake Michigan.

On the same date about 214 feet of metal elevated walk was completed shoreward from the tower in its new position.

STONY POINT LIGHT-STATION.—Notice is hereby given that, on or about Oct. 31, 1901, the work of increasing the height of the tower about 20 feet will be completed, and the height of the focal plane of the light will then be 58 in place of 38 feet above mean lake level, as at present.

At the same time the color of the tower will be changed from grey to white.

The exhibition of the light will not be interrupted.

This light is located on Stony Point, easterly end of Lake Ontario.

LAKE MICHIGAN.—Notice is hereby given that, on or about October 8, 1901, the following changes will be made in the aids to navigation in South Manitou Island passage, northwesterly end of Lake Michigan:

RUSH SHOAL BUOY.—This red and black horizontally striped second-class can buoy marking Rush Shoal, N. 75° E., 6¾ miles from South Manitou Island light-house, will be permanently discontinued.

NORTH MANITOU SHOAL SOUTH-EAST END GAS BUOY.—A red conical buoy surmounted by a pyramidal latticework supporting the lantern, showing a fixed white light, and marked "North Manitou," will be established in 20 feet of water (at present stage of Lake Michigan), on the southeasterly end of the shoal ground extending to the southward from the south end of North Manitou Island.

South Manitou Island light-house, S. 80° W. (W. ⅞ S.), 6⅜ miles; North Manitou Island light-house, N. 7° W. (N. ⅝ W.). 2⅜ miles.

NORTH MANITOU SHOAL SOUTH-WEST END BUOY.—A red second-class can, marked "N. M. S," will be established in 20 feet of water (at the present stage of Lake Michigan), on the southwesterly end of the shoal ground extending to the southward from the south end of North Manitou Island.

North Manitou Island light-house, N. 29° E. (N.N.E. ⅝ E.) 4⅜ miles; South Manitou Island light-house, N. 88° W. (W. 3/16 N.), 4 miles.

Bearings are true; miles are statute miles.

PORTAGE LAKE PIERHEAD RANGE LIGHT-STATION.—Notice is hereby given that, on or about October 19, 1901, the structures and lights at this station will be moved about 700 feet from their present respective positions, without other change, to the extreme outer end of the recently extended north pier at the harbor of Portage Lake, easterly side of Lake Michigan.

FRONT LIGHT.—A fixed red lens-lantern light, on a post, 23 feet above the level of the lake, and with the next forms a range showing direction of piers and course for entering the harbor.

REAR LIGHT.—A fixed red, fourth-order light, 40 feet above the level of the lake, on a white, square, pyramidal, framework tower, upper part inclosed.

At the same time 750 feet of metal elevated walk will be built from the tower shoreward.

The approximate geographical position of the light, as taken from Lake Michigan coast chart No. 9 of the United States survey of the northern and northwestern lakes, will be, latitude north, 44° 21′(31″); lontitude west, 86° 16′(10″).

RACINE REEF BEACON LIGHT.—Notice is hereby given that, on or about October 12, 1901, this fixed white lens-lantern light, heretofore reported temporarily discontinued, will be re-established, as heretofore, on the square, yellow-brick pier supporting a square, gray, pyramidal, skeleton, steel tower surmounted by a small deck and lantern post with lantern, and carrying three gray cylindrical gas tanks, on Racine Reef, near the entrance to Racine Harbor, westerly side of Lake Michigan.

The light will be shown at a height of 57 feet above mean lake level, and will illuminate the entire horizon as heretofore.

By order of the Light-House Board:

N. H. FARQUHAR,
Rear-Admiral, U. S. Navy, Chairman.

STATEMENT OF THE VISIBLE SUPPLY OF GRAIN.

As compiled by George F. Stone, Secretary Chicago Board of Trade, October 5, 1901.

CITIES WHERE STORED.	WHEAT. Bushels.	CORN. Bushels.	OATS. Bushels.	RYE. Bushels.	BARLEY Bushels.
Buffalo	1,162,000	1,628,000	257,000	44,000	314,000
Chicago	5,209,000	6,705,000	1,998,000	249,000	21,000
Detroit	519,000	106,000	90,000	216,000	30,000
Duluth	4,901,000	612,000	432,000	516,000	502,000
Fort William, Ont.	1,748,000	..	.....	.....	.....
Milwaukee	116,000	133,000	431,000	17,000	172,000
Port Arthur, Ont.	80,000	.....	.....	.....	.....
Toledo	635,000	603,000	1,180,000	397,000	8,000
Toronto	82,000	.....	.....	.....	47,000
On Canals	432,000	396,000	179,000	17,000	328,000
On Lakes	2,258,000	1,399,000	405,000	.....	273,000
On Miss. River	.....	....	.....	.....	.. ..
Grand Total	37,474,000	14,026,000	8,288,000	1,800,000	1,994,000
Corresponding Date, 1900	55,401,000	7,887,000	12,019,000	935,000	1,926,000
Increase for week	2,170,000	537,000	.....	26,000	119,000
Decrease " "	.....	.....	684,000	.....	.....

While the stock of grain at lake ports only is here given the total shows the figures for the entire country except the Pacific Slope.

NOTES.

MARIE JOANNA KERSAHO, whose death on the Island of Croix, in France, at the age of 72, has been reported, had the distinction of being the only woman sea captain in the world. She went to sea with her father when she was 12 years old, and after his death she captained three more vessels, and obtained several medals and money rewards for heroism on the water.

THE revenue cutters Gresham, Galveston, Manning, McCulloch, Algonquin, Onondaga, Seminole, Hudson and Calumet have been supplied with the Quiggins patent evaporator, manufactured by the James Reilly Repair and Supply Company, of New York City. These evaporators are highly endorsed as enjoying the special advantages of lightness, compactness, adaptability to space, no extra room being required for scaling. Their capacity may also be increased without changing space. Other United States warships are also using the evaporators, as well as large numbers of merchant steamers, and the leading shipbuilding companies in the United States.

THE Navy Department is making strenuous efforts to enlist the Navy up to the maximum allowed by law before Congress convenes in December. At the present time the service is short about two thousand men, and as these are all needed at the present time and as it is the intention of the Department to ask Congress to increase the enlisted personnel by three thousand men, every effort will be made to get capable men qualified for service. It is announced at the Department that very few, if any, of the ships of the Navy now in commission have a full quota of enlisted men. The endeavors of the Department during the past summer to obtain men from Southern points did not meet with the success anticipated.

LOSS OF THE WILSON.

The whaleback steamer Thomas Wilson went on the reef at Bailey's Harbor, Tuesday night, during a heavy storm and dense fog, and word has been received that she has broken in two and is a total loss. The Wilson was light, and bound to Escanaba for an ore cargo. Losing her bearings, she struck the reef while going at a high rate of speed. The crew of twenty was taken off by the Bailey's Harbor life-saving crew.

The Thomas Wilson was built at West Superior in 1892, had a gross measurement of 1,713 tons, and was valued at $125,000 in the Inland Lloyd's Register. The loss is a total one to the steel trust, which carries no insurance on its vessels.

PASSENGER STEAMERS.

Southampton, Oct. 9. Arrived—Philadelphia from New York.

Plymouth, Oct. 9. Arrived—Deutschland, from New York.

New York, Oct. 9. Arrived—Barbarossa, from Bremen; Oceanic, from Liverpool.

Delaware Breakwarer, Oct. 9. Passed in—Pennland, from Antwerp.

New York, Oct. 9. Sailed—St. Paul, for Southampton; Majestic, for Liverpool; Mongolian, for Glasgow.

Liverpool, Oct. 8. Arrived—Saxonia, from Boston. 9th, Noordland, from Philadelphia.

Glasgow, Oct. 8. Arrived—Furnessia, from New York.

Sydney, N. S. W., Oct. 9.—Arrived—Ventura, from San Francisco, via Honolulu and Auckland.

London Oct. 9. Arrived—Manitou, from New York.

Cherbourg, Oct. 9. Arrived—Deutschland, from New York.

Southampton, Oct. 9. Sailed—Kaiser Wilhelm der Grosse, from Bremen, for New York, via Cherbourg.

Glasgow, Oct. 9. Sailed—Norwegian, for Boston.

Queenstown, Oct. 9. Arrived—Cymric, from New York.

Rotterdam, Oct. 9. Arrived—Maasdam, from New York.

Cherbourg, Oct. 9. Sailed—Kaiser Wilhelm der Grosse, for New York.

New York, Oct. 9. Arrived—Marquette, from London.

Queenstown, Oct. 9. Arrived—Servia, from New York for Liverpool (and proceeded).

Boston, Oct. 9. Arrived—Ivernia, Liverpool and Queenstown.

Queenstown, Oct. 9. Arrived—Germanic, from New York, for Liverpool.

Salvage—Amount of Compensation.—Where there has been no mistake of fact or application of an unwarranted rule of compensation, in arriving at an award for salvage services, and the amount cannot be clearly seen to be inappropriate, an appellate court will not disturb the decision of the trial court. Simpson et al. vs. Dollar et al., 109 Fed. Rep. (U. S.) 814.

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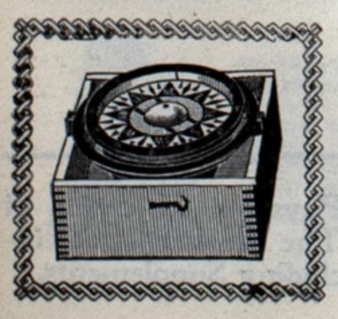

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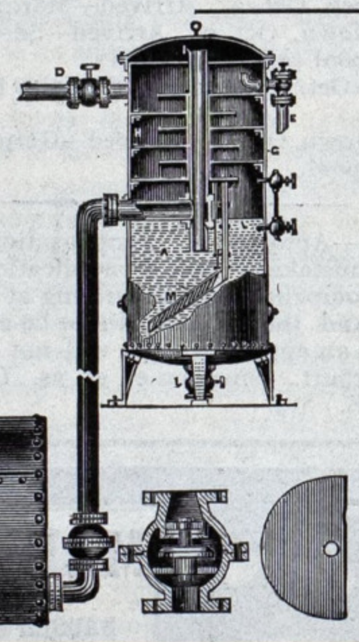

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Minnesota Iron Co.'s steamer Presque Isle.

American Steel Barge Co.'s steamer Alex. McDougall.

Lake Michigan & Lake Superior Transportation Co.'s steamer Manitou.

Bessemer Steamship Co.'s steamers S. F. B. Morse and Douglas Houghton.

American Transportation Co.'s steamers John Harper and Alex. Nimick.

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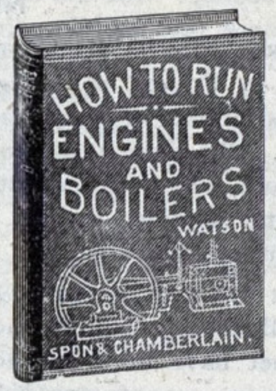

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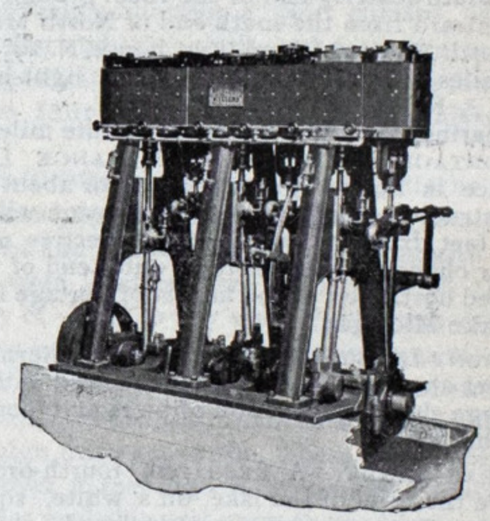

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DESERTING SEAMEN.

Treaties—Proceedings for Restoration of Deserting Seamen—Treaty with Great Britain.—A treaty made in 1892 between Great Britain and the United States provides that a British consul shall have power to require from the proper authority the assistance "provided by law" in apprehending and restoring deserting British seamen. Rev. St. § 5280, in force at that time, provides that, on application of a consul of any foreign government having a treaty stipulating for the restoration of seamen deserting, it shall be the duty of any court, judge, or commissioner to cause the arrest of a person charged with being a deserting seaman, and, if the facts stated are found to be true, to deliver up such person, not being a citizen of the United States, to the consul, and at his expense until the consul finds opportunity to send him back to the dominions of such foreign government. Held, that a commissioner, who, proceeding under such treaty and statute has adjudged persons to be deserting British seamen, while he may lawfully order their delivery to the consul, or his authorized representative, on board a British ship within the district, had no power to order them restored to the ship "under the directions" of the consul. United States vs. Kelly et al., 108 Fed. Rep. (U. S.) 538.

DREDGING COMPANIES.

Effective efforts are now being made to line up the dredging companies on the lakes preparatory to consolidation by the first of next year. The companies to engage in this united movement are numerous. The capitalization of the company will be $8,000,000 and the returns from the sale of stock and the bond issue will be used in purchasing the dredging plants as well as defraying the expenses incidental to the formation of the company and starting it in business. One of the aims of the company will be to retain for the dredging companies the business on the lakes, with the understanding that the constituent companies shall also depend on the lake business for their sustenance. The cause for this movement is incidentally the chief incentive for the formation of the trust, so-called. Two years ago Breyman & Co., of Chicago, went to Boston and entered a bidding contest for work in that harbor. The appearance there of a lake company was a complete surprise to the Atlantic pool of dredging concerns, and as a result Breyman & Co.'s bid was the lowest, and it scooped in the business, much to the dismay of the Eastern concerns. As a retaliatory measure Boston dredgers came among the Lake Superior bidders when a big piece of work was to be let and underbid the lake pool, and likewise scooped in the business. Breyman & Co. have two years to run on their Boston contract, and the Boston dredgers have plenty of work ahead on Lake Superior. A more far reaching result has been the reduction of the price per yard in upper lake work from twelve cents to six or seven, and the business is not as profitable as it once was. To eliminate this competition and return prices to their old standard are the principal aims of the company now being formed.

The North German Lloyd steamer Kronprinz Wilhelm arrived at Plymouth from New York, Oct. 1, having made the fastest maiden voyage on record, 5 days, 9 hours and 48 minutes from Sandy Hook light-ship. Her best day's run was 540 miles.

Duncan Tinkiss, proprietor of the Mansion House at Little Current, Ont., is dead. He was the sole male survivor of the terrible wreck of the steamer Asia off Point au Baril, Georgian Bay, on Sept. 14, 1882. Tinkiss and a Miss Morrison, the only survivors of 125 persons on board the steamer drifted ashore. They were found by an Indian and taken to Parry Sound, bringing the first news of the loss.

THE Navy Department is making strenuous efforts to enlist the Navy up to the maximum allowed by law before Congress convenes in December. At the present time the service is short about two thousand men, and as these are all needed at the present time and as it is the intention of the Department to ask Congress to increase the enlisted personnel by three thousand men, every effort will be made to get capable men qualified for service. It is announced at the Department that very few, if any, of the ships of the Navy now in commission have a full quota of enlisted men. The endeavors of the Department during the past summer to obtain men from Southern points did not meet with the success anticipated.

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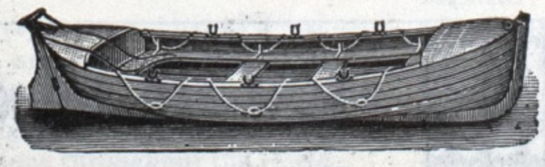
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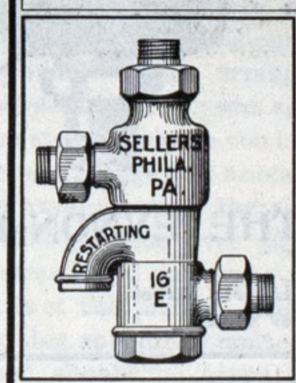

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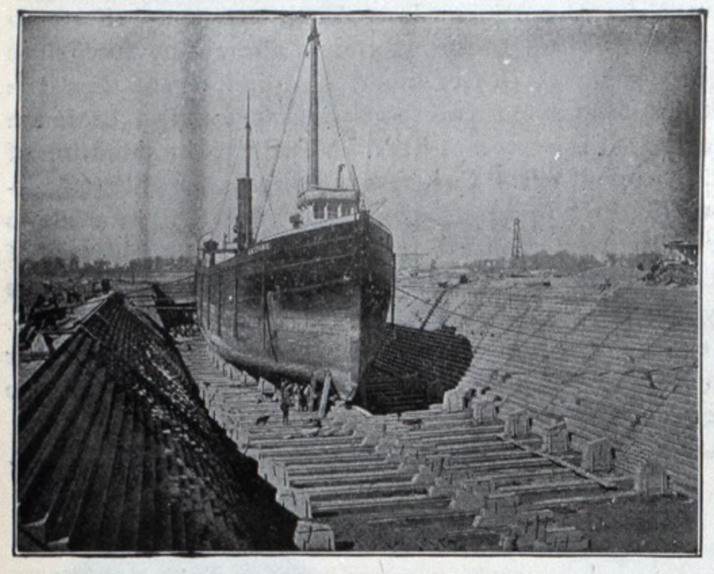

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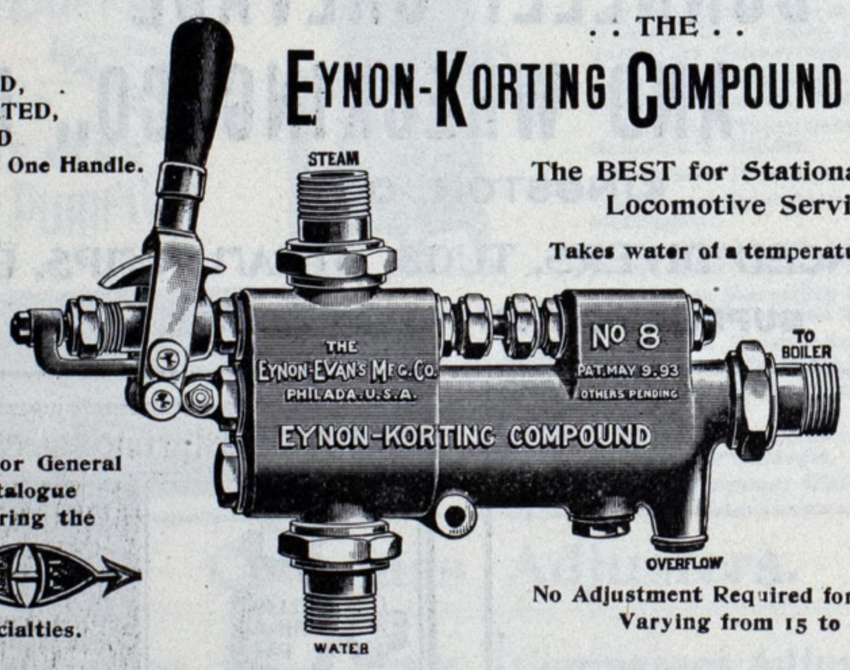

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